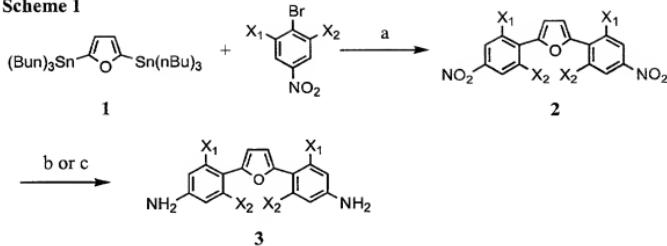


Scheme 1

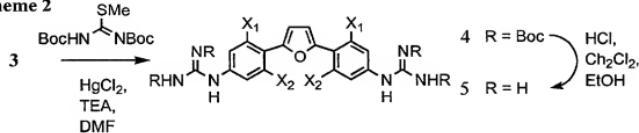


a) $\text{Pd}(\text{PPh}_3)$, 1,4-dioxane, Δ .

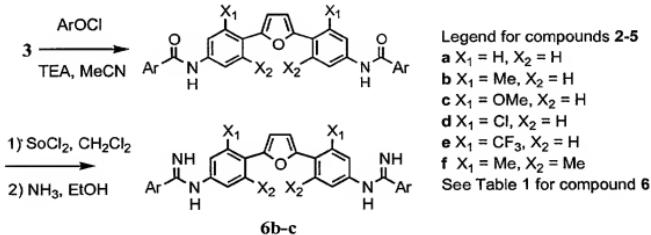
b) H_2 , Pd/C , EtOAc , EtOH .

c) SnCl_2 dihydrate, EtOH , DMSO , Δ .

Scheme 2



Scheme 3



Scheme 4

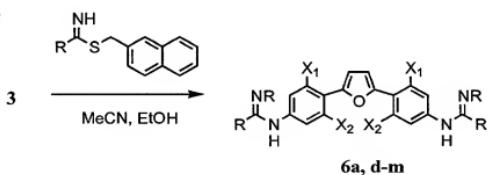


FIG. 1